

Appln No. 10/760232
Amdt. Dated: November 14, 2006
Response to Office Action of September 19, 2006

3

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:**1. (Currently Amended) A printhead assembly, comprising:**

at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, a support member supporting and carrying the printing fluid for the at least two printhead integrated circuits, and an electrical connector for connecting electrical signals to the at least two printhead integrated circuits;

drive electronics incorporating at least two controllers for processing print data and controlling the printing operation of at least one of the at least two printhead integrated circuits via the electrical connector to print the processed print data, the at least two controllers being interconnected; and

a casing in which the at least one printhead module and the drive electronics are removably mounted, the casing being configured to removably mount the printhead assembly to a printer unit.

2. (Original) A printhead assembly according to claim 1, wherein:

the casing comprises a support frame on which at least two mounting elements are arranged in abutting relationship along a longitudinal direction of the casing; and

the at least two controllers are each arranged on a printed circuit board, each of the printed circuit boards being removably mounted by at least one of the two or more mounting elements and being interconnected by an electrical connecting member located between the abutting mounting elements.

3. (Original) A printhead assembly according to claim 2, wherein each of the mounting elements comprises side regions having raised and recessed portions arranged so that the recessed portions of abutting mounting elements form a recess into which the electrical connecting member can be placed.

4. (Original) A printhead assembly according to claim 3, wherein the electrical connecting member comprises a non-conductive material which is clad with conductive

Appln No. 10/760232
Amdt. Dated: November 14, 2006
Response to Office Action of September 19, 2006

4

strips, the electrical connecting member being arranged so as to fit within the recess formed between abutting mounting elements.

5. (Original) A printhead assembly according to claim 4, wherein the conductive strips are positioned to overlay a series of spaced connection strips at the edge regions of each of the individual printed circuit boards.

6. (Original) A printhead assembly according to claim 5, wherein there is twice as many conductive strips of the electrical connecting member as there are connection strips of the printed circuit boards, whereby each connection strip of the printed circuit board will engage with at least one of two adjacent conductive strips.

7. (Original) A printhead assembly according to claim 2, wherein one printed circuit board having one controller thereon is supported by more than one mounting element.

8. (Original) A printhead assembly according to claim 1, wherein:

the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the electrical connector, and at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member; and

the support member has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members.